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PATENT

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

James A. Krom, et al.

For:

REACTION PRODUCT DERIVED  
FROM AMINE-FUNCTIONALIZED  
ELASTOMERS AND MALEATED  
POLYOLEFINS

Serial No.:

09/097,035

Filed:

June 12, 1998

Examiner:

D.R. Wilson

Art Unit:

1713

Last Office Action:

February 1, 2001

Decision Issued:

Mar 14, 2003

Appeal No.:

2001-2478

Attorney Docket No.:

9608042/FIRZ 20007

BOARD OF PATENT  
APPEALS &  
INTERFERENCES

AUG -4 2003

APPELLANTS' REQUEST FOR REHEARING OF  
THE DECISION OF THE BOARD OF PATENT APPEALS AND  
INTERFERENCES UNDER 37 CFR §1.197

**Mail Stop – Appeal Brief**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

This is a Request for Rehearing of the Decision of the Board of Patent Appeals and Interferences, mailed on March 14, 2003 and is being mailed within two months. Appellants request that the affirmance of the Examiner's rejection of claims 1-4, 6-10, and 13-14 under 35 U.S.C. §102(b) over Coran be reversed.

Remarks

The Decision of the Board

In the Board's decision, the Examiner's rejection of claims 1-4, 6-10, and 13-14 under 35 U.S.C. §102(b) over Coran was affirmed.

The Examiner's rejection of claims 1-4, 6-10, 13-14, and 21 under 35 U.S.C. §103(a) over Berta in view of Stayer and appellants' admissions was reversed.

Accordingly, there are no rejections of pending claim 21.

#### Grouping of the Claims

In the Appellants' Brief filed on December 4, 2000, the following groupings of claims were said to stand together:

- Group I: Claims 1-4, 6-7, and 13-14
- Group II: Claims 8-10
- Group III: Claim 21

On page 3 of its decision, the Board, to the extent that these claims were argued separately, indicated that it considered each group separately.

#### Appellants Request Reconsideration of the Board's rejection of Claims 1-4, 6-10, and 13-14 under 35 U.S.C. §102(b) over Coran

##### Claims 1-4, 6-7, and 13-14

At issue, is the Board's interpretation of the meaning of the words "comprised substantially of" as recited in claim 1. In its decision, the Board asserted that "comprising substantially" renders the claimed copolymer open to other ingredients, even in major amounts, citing Vehicle Techs. v Titan Wheel Int'l, Inc., 212 F.3d 1377, 1378 (Fed. Cir. 2000).

The claims of the patent at issue in the Vehicle Techs. case do not, however, use this language, but instead the words "consisting of," which is compared with the broader scope of "comprising." Thus, the court does not address the scope of "comprised substantially of." Appellants submit that the Board was in error in determining that "comprising substantially" encompasses major amounts of other ingredients.

The United States Court of Appeals for the Federal Circuit has recognized that the term "substantially" in patent claims gives some definitional leeway. Seattle Box Co. v. Industrial Crating and Packing, 731 F.2d 818, 829 (Fed. Cir. 1984). The term can thus be used to prevent avoidance of infringement by minor changes that do not affect the results sought and accomplished. Moss v. Patterson-Ballagh Corp., 89 F.Supp. 619, 635 (S.D. Cal. 1950) affd., 201 F.2d 403 (9th Cir 1953).

However, the term has not been interpreted to include **major** amounts of another ingredient. For example, the words "substantially vertical face" were construed to mean **the same as or very close to** a vertical face. Amhil Enterprises Ltd. v. Wawa, Inc., 81 F.3d 1554, 1562 (Fed. Cir. 1996).

In York Products, Inc. v. Central Tractor Farm & Family Center, 99 F.3d 1568, 1572 (Fed. Cir. 1996), the Court agreed with the district court that "substantially" means "nearly the entire." "Substantially the entire height thereof" meant that ridges must cover **nearly the entire** length of a sidewall. The patent disclosed no novel uses of claim words. Id. Ordinarily, therefore, "substantially" means "considerable in . . . extent," American Heritage Dictionary Second College Edition, 1213 (2d ed. 1982), or "largely but not wholly that which is specified," Webster's Ninth New Collegiate Dictionary, 1176 (9th ed. 1983). Id. Thus, the modifier "substantially" conveys that the ridge members extend over **most of** the "entire height" of the sidewall portions. Id. Absent any contrary meaning disclosed in the specification, the court agreed that "a substantial part of the entire height" requires that the ridges must cover **nearly the entire** height. Id.

In John Hopkins University v. Cellpro, Inc., 152 F.3d 1342, 1349 (Fed. Cir. 1998), the court stated that the district court was "reluctant to impose mathematical certainty on an ambiguous term when [the] patent application has strenuously avoided doing so" with regard to the limitation "substantially free of mature lymphoid and myeloid cells." However, despite this reluctance, the court adopted a construction that required "a cell suspension of **at least 90% purity**"; in other words, "the cell suspension must contain **no more than 10%** mature lymphoid and myeloid cells" in order to be within the scope of the claims. Id. The court observed that while the specification did not explicitly define the meaning of the words "substantially free," the specification did acknowledge that the techniques used to assess the purity of My-10-positive populations "have not detected any appreciable number (i.e., not significantly above background) of normal mature . . . cells." Finally, the court noted that its construction was consistent with the patent's disclosure of the production of a stem cell suspension of 90% purity. Id. The Court agreed with the district court and stated a patent claim should be construed to encompass at least one disclosed embodiment in the written description portion of the patent specification. Id. at 1355.

Thus, the court broadened the definition of substantially, to ensure that at least one disclosed embodiment was within its scope.

In the present case claim 1 requires the second polymer be comprised substantially of a copolymer of conjugated diene units or comprised substantially of a copolymer comprised substantially of conjugated diene and vinyl aromatic units. Appellants submit that a 20% nitrile containing copolymer, as disclosed by Coran is not **very close to or nearly the entire** amount conjugated diene and/or vinyl aromatic units. Rather, there is a substantial amount present which is not one of these components.

Accordingly, it is respectfully requested that the Board reverses its affirmation of the Examiner's rejection of claims 1-4, 6-7, and 13-14 under 35 U.S.C. §102(b) over Coran.

#### Claims 8-10

The Board found that with respect to claims 8-10, the Appellants' Appeal Brief failed to set forth any specific reasons, other than the arguments for claim 1 (Decision, page 8, citing Brief, page 9).

However, Appellants pointed out in their brief that claims 8 and 9 recite that the second polymer comprises at least 40 weight % conjugated diene and claim 10, at least 50 weight % conjugated diene, the balance being substantially vinyl aromatic units. Coran fails to disclose a polymer in which at least 40% is conjugated diene and the balance is substantially vinyl aromatic units. As noted in the Appellants' Brief, a 20% or greater nitrile rubber requirement such as that of Coran would not encompass a polymer that is at least 40% conjugated diene units or substantially conjugated diene and vinyl aromatic units. This is because, even if the Coran copolymer were to comprise 40% conjugated diene, the 20% or greater nitrile rubber content would mean that the balance of 60% of the composition would not be vinyl aromatic, but rather, **at least two thirds** of the balance would be nitrile rubber. This cannot be encompassed in the meaning of the term "substantially," even with its broadest reading, in view of the pertinent case law.

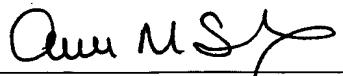
Accordingly, Appellants respectfully requested that the Board reverses its affirmation of the Examiner's rejection of claims 8-10 under 35 U.S.C. §102(b) over Coran.

Conclusion

Accordingly, Appellants respectfully request the Board to reverse the final rejection of claims 1-4, 6-10, and 13-14 under 35 U.S.C. §102(b) over Coran.

Respectfully Submitted,

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CERTIFICATE OF MAILING

I hereby certify that this APPELLANTS' REQUEST FOR REHEARING OF THE DECISION OF THE BOARD OF PATENT APPEALS AND INTERFERENCES UNDER 37 CFR §1.197 is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450 on May 14, 2003.

  
Cheryl Kobylinski